

Aero Series Commercial Energy Saver Multi Flue Oil-Powered Models CF-38 / CF-80 / CF-100



Photo is of
CF-80-3

The Multi Flue Oil-Powered Models feature:

- **Automatic Controls**—Single aquastat (shipped with burner) with mechanical control monitors tank temperature through upper and lower ports. Provides more uniform result for controls. (CF-80 and CF-100). Electronic control aquastat on CF-38 with built-in high limit.
- **Factory installed Hydrojet® 2™ Sediment Reduction System**—Cold water inlet sediment reducing device helps prevent sediment build up in the tank.
- **Vitraglas® Lining**—Bradford White tanks are lined with an exclusively engineered enamel formula that provides superior tank protection from the highly corrosive effects of hot water. This formula (Vitraglas®) is fused to the steel surface by firing at a temperature of over 1600° F.
- **Non-CFC Foam Insulation**—Covers the sides and top of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity.
- **Magnesium Anode Rods**—Employed to provide an extra measure of corrosion prevention for longer life.
- **Water Connections**—Factory installed dielectric waterway fittings extend water heater life and eases installation.
- **Hand Hole Cleanout**—Allows inspection of tank interior and facilitates removal of water heater's principal deterrent to long life—accumulated lime and sediment deposits.
- **T&P Relief Valve**—Installed.
- **Brass Drain Valve**—Durable tamper proof design.
- **ASME Code Construction**—Available on 80 and 100 gallon (303 and 379 liters) models, not available on 38 (144 liter) gallon models.
- **Carlin Burners**—All burners are 120V, 1-stage with multiple firing rates. Beckett and Riello are optional burners, but not available through Bradford White.
- **New Carlin Burners are Compatible with Biofuel**—Up to B5 (5% Biofuel) can be used with water heater, provided the Biofuel meets ASTM D6751.



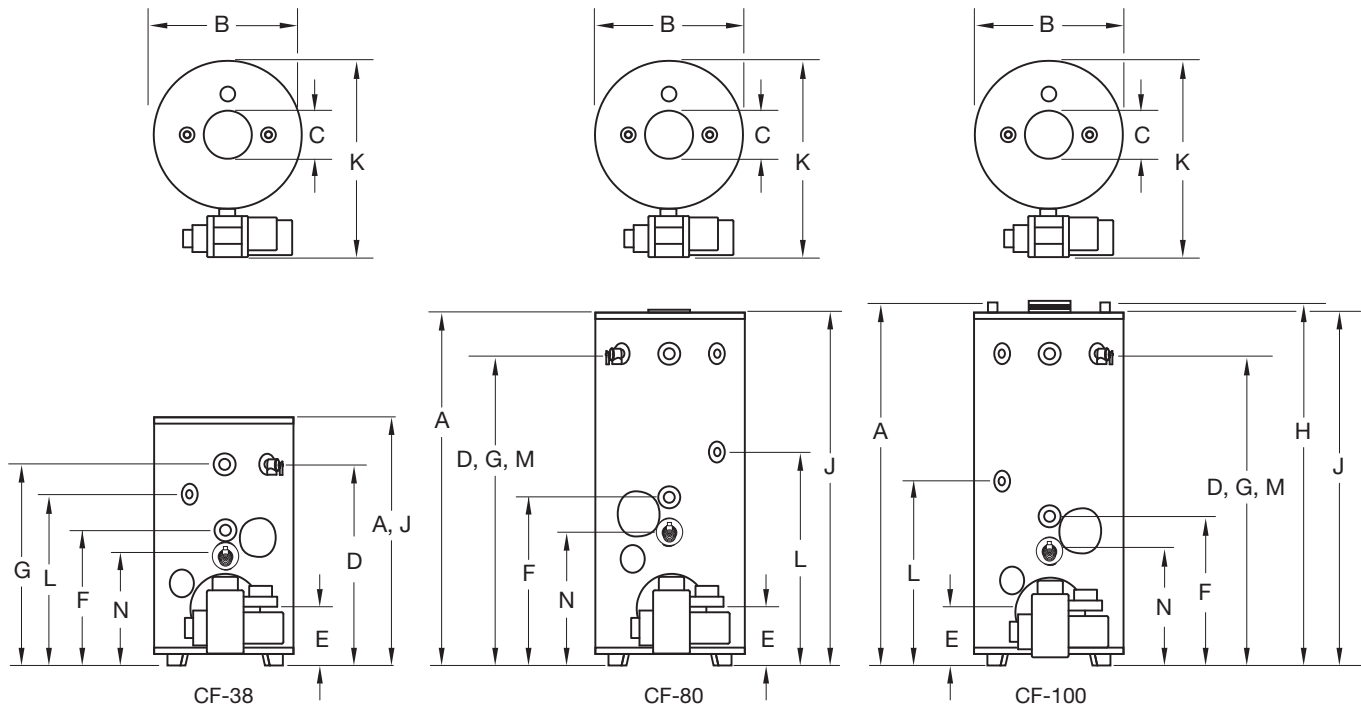
3-Year Limited Tank Warranties / 1-Year Limited Warranty on Component Parts.

For more information on warranty, please visit www.bradfordwhite.com

For products installed in USA, Canada and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

Commercial Energy Saver Multi Flue Oil-Powered Models

CF-38 / CF-80 / CF-100



Energy Saver Models

Oil

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed
80% Recovery Efficiency

Model Number	A Floor to Flue Conn.	B Jacket Dia.	C Vent Size	D Floor to T&P Conn.	E Floor to C/L Burner Opening	F Front / Rear Cold Water Conn.	G Front / Rear Hot Water Conn.	H Floor to Top Water Conn.	J Floor to Heater Top	K Depth**	L Floor to Aquastat	M Floor to Aquastat Avg Bulb	N Floor to Drain Valve	Std. Shipping Weight *	ASME Shipping Weight *
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	lbs.
CF-38-3	50 ³ / ₈	28 ³ / ₄	8	40 ³ / ₄	12 ³ / ₈	26	41 ¹ / ₂	-	50 ³ / ₈	35 ¹³ / ₁₆	35	-	21 ³ / ₄	428	-
CF-80-3	72 ³ / ₄	30 ¹ / ₄	8	62 ³ / ₈	12 ³ / ₈	34 ¹ / ₄	62 ³ / ₈	-	72 ¹ / ₄	43 ⁵ / ₈	43 ³ / ₈	62 ³ / ₈	27 ⁷ / ₈	850	875
CF-100-3	73 ¹ / ₄	30 ¹ / ₄	8	62 ³ / ₈	11 ³ / ₈	29 ⁵ / ₈	62 ³ / ₈	72 ³ / ₄	72 ¹ / ₄	39 ³ / ₈	36 ⁷ / ₈	62 ³ / ₈	29 ⁵ / ₈	760	798
Model Number	A Floor to Flue Conn.	B Jacket Dia.	C Vent Size	D Floor to T&P Conn.	E Floor to C/L Burner Opening	F Front / Rear Cold Water Conn.	G Front / Rear Hot Water Conn.	H Floor to Top Water Conn.	J Floor to Heater Top	K Depth**	L Floor to Aquastat	M Floor to Aquastat Avg Bulb	N Floor to Drain Valve	Std. Shipping Weight *	ASME Shipping Weight *
	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	kg.	kg.
CF-38-3	1280	718	203	1035	314	660	1054	-	1280	910	889	-	552	194	-
CF-80-3	1848	768	203	1584	321	870	1584	-	1835	1108	1102	1584	708	386	397
CF-100-3	1861	768	203	1584	289	752	1584	1848	1835	1000	937	1584	752	345	362

* Weight does not include burner and controls.

** Depth includes burner dimensions.

Model Number	Water Connections Size Front / Rear / Top			Aquastat and Avg. Bulb Tapping	Relief Valve Opening	Drain Valve Opening
	in.	in.	in.	in.	in.	in.
CF-38-3	1 ¹ / ₂	1 ¹ / ₂	-	3 ⁴ / ₄	1	3 ⁴ / ₄
CF-80-3	1 ¹ / ₂	-	-	3 ⁴ / ₄	1	3 ⁴ / ₄
CF-100-3	1 ¹ / ₂	-	-	3 ⁴ / ₄	1	3 ⁴ / ₄

Model Number	Water Connections Size Front / Rear / Top			Aquastat and Avg. Bulb Tapping	Relief Valve Opening	Drain Valve Opening
	mm.	mm.	mm.	mm.	mm.	mm.
CF-38-3	38	30	-	19	25	19
CF-80-3	38	-	-	19	25	19
CF-100-3	38	-	-	19	25	19

Specifications for Commercial Multi Flue Water Heaters

	CF-38	CF-80	CF-100
Tank Capacity Gallons	38	80	100
Number of Flues	11	20	12
Firing Rate Range GPH	1.75 to 2.50	3.50 to 5.00	2.50 to 3.00
Model Number	CF-38-350-3	CF-80-700-3(A)	CF-100-420-3(A)
Firing Rate GPH	2.50	5.00	3.00
Btu/hr Input	350,000	700,000	420,000
Recovery Rate – 100°F Rise	334	665	410
– 90°F Rise	371	740	456
Model Number	CF-38-315-3	CF-80-630-3(A)	CF-100-350-3(A)
Firing Rate GPH	2.25	4.50	2.50
Btu/hr Input	315,000	630,000	350,000
Recovery Rate – 100°F Rise	304	608	355
– 90°F Rise	338	676	395
Model Number	CF-38-280-3	CF-80-560-3(A)	–
Firing Rate GPH	2.00	4.00	–
Btu/hr Input	280,000	560,000	–
Recovery Rate – 100°F Rise	273	543	–
– 90°F Rise	304	604	–
Model Number	CF-38-245-3	CF-80-490-3(A)	–
Firing Rate GPH	1.75	3.50	–
Btu/hr Input	245,000	490,000	–
Recovery Rate – 100°F Rise	240	483	–
– 90°F Rise	267	537	–
T&P Valve	Installed	Installed	Included
Maximum Operating Temperature	180°F	180°F	180°F
Flue Collar Size	8"	8"	8"
Number of Anodes	3	4	4
Water Connection Location	Front	Front	Front & Top
Water Connection Type	1½" Male NPT	1½"	1½" & 1½"
Auxiliary Connections Location	Rear – 1½"	N/A	N/A
Auxiliary Connections Type	1½" Female NPT Capped	N/A	N/A
Hand Hole Clean Out	Included	Included	Included
Water Heater Shipping Weight – lbs.	428	850	768
Water Heater Height	50⅜"	72¼"	72¼"
Water Heater Shipping Weight (ASME)– lbs.	–	875	798
Water Heater Diameter	28¼"	30¼"	30¼"
Water Heater Packaging	TriWall Carton	Wood Crate	Wood Crate

(A) ASME Construction available for CF-80 and CF-100 only.

For ASME construction add "A" to the model number as displayed (Ex. CF-80-490-3A).

These models meet or exceed the Thermal Efficiency and Standby Loss Requirements of ASHRAE 90.1b (current edition).

All models are design certified for up to 180°F. (82°C) application as an Automatic Storage Heater, and an Automatic Circulating Tank Heater.

As an Automatic Storage Heater, all models are complete self-contained water heating systems. It needs no separate storage tank, pump, wiring or elaborate piping network. When equipped with a mixing valve, it will supply 180°F (82°C) sanitizing and 140°F (60°C) general purpose hot water simultaneously. (Maximum temperature for CF-38 is 160°F). These models can be used either as a single unit or in multiples connected in parallel.

Sample Specification

The water heater shall be a Bradford White model _____ with a rated storage capacity of not less than _____ gallons, a minimum input of _____ BTUH/KW, a firing rate of _____ GPH/LPH, and a minimum recovery of _____ GPH/LPH at 100°F (56°C). temperature rise. It shall be design certified for 180°F (82°C). application, either with or without a separate storage tank. The tank shall be lined with Vitraglas® vitreous enamel and shall have a bolted hand hole cleanout. The tank shall have multiple extruded magnesium anode rods installed in separate head couplings. This water heater shall be equipped with cold water inlet, Hydrojet® Sediment Reduction System, an ASME rated T&P relief valve and a flame retention high speed oil burner (120V/60Hz. or 220V/50 Hz. AC required). The entire installation shall be made in compliance with state and local codes and ordinances.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.



Ambler, PA

For U.S. and Canada field service, contact your professional installer or local Bradford White sales representative.

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International: Telephone 215-641-9400 • Telefax 215-641-9750 / www.bradfordwhite.com

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